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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/775,642	02/10/2004	Sachin Desai	OR03-12701	1300

51067 7590 11/16/2006

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EXAMINER

GILLIS, BRIAN J

ART UNIT	PAPER NUMBER
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2141

DATE MAILED: 11/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/775,642	DESAI ET AL.	
	Examiner	Art Unit	
	Brian J. Gillis	2141	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 7, 8, 12, 13, 14, and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Neeman et al (Foreign Publication GB 2367219A).

(Claim 7 discloses) a computer-implemented method of dynamically selecting a level of compression to apply to a set of data, the method comprising: receiving from a client a request for a set of data (Neeman et al shows a source sends requested data to clients (page 8, lines 1-3).); determining a bandwidth available on a communication link used by the client (Neeman et al shows the bandwidth is determined over the transmission link (page 9, lines 4-6).); based on the determined bandwidth, dynamically selecting a level of compression to apply to the set of data (Neeman et al shows the level of compression is set according to the bandwidth (page 9, lines 30-32).); and compressing the data using the selected level of compression prior to transmitting the set of data toward the client (Neeman et al shows the data is compressed (page 9, lines 20-29)).

(Claim 8 discloses) the method of claim 7, wherein the dynamically selected level of compression is inversely proportional to the determined bandwidth (Neeman et al shows the compression is selected based on bandwidth (page 12, lines 6-12)).

(Claim 12 discloses) a computer readable medium storing instructions that, when executed by a computer, cause the computer to perform a method of dynamically selecting a level of compression to apply to a set of data, the method comprising: receiving from a client a request for a set of data (Neeman et al shows a source sends requested data to clients (page 8, lines 1-3).); determining a bandwidth available on a communication link used by the client (Neeman et al shows the bandwidth is determined over the transmission link (page 9, lines 4-6).); based on the determined bandwidth, dynamically selecting a level of compression to apply to the set of data (Neeman et al shows the level of compression is set according to the bandwidth (page 9, lines 30-32).); and compressing the data using the selected level of compression prior to transmitting the set of data toward the client (Neeman et al shows the data is compressed (page 9, lines 20-29)).

(Claim 13 discloses) an apparatus for dynamically selecting a level of compression to be applied to data to be transmitted from the apparatus, comprising: a compression module configured to compress, with a specified level of compression, a set of data to be transmitted to a data requester (Neeman et al shows the data is compressed prior to being transmitted (page 9, lines 20-29).); and a dynamic compression selection module configured to dynamically select said level of compression based on a bandwidth associated with a communication link employed by the data requestor (Neeman et al shows the level of compression is set according to the bandwidth (page 9, lines 30-32)).

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(Claim 14 discloses) the apparatus of claim 13, further comprising: a bandwidth determination module configured to determine the bandwidth of a communication link used by the data requester (Neeman et al shows the bandwidth is determined over the transmission link (page 9, lines 4-6)).

(Claim 16 discloses) the apparatus of claim 14, wherein said bandwidth determination module is configured to retrieve the bandwidth from a database configured to identify bandwidths associated with data requesters' communication links (Neeman et al shows the bandwidth may be returned from a receiving client who simply reports the bandwidth (page 9, lines 5-6)).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, and 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neeman et al (Foreign Publication GB 2367219A) in view of Hunt et al (US Patent #5,764,235), in view of Jason, Jr. (US PG PUB US2003/0061356).

Claim 1 discloses an automated method of dynamically selecting a level of compression to be applied to data to be transmitted, the method comprising: receiving a data request at a server configured to serve data; identifying a bandwidth associated with a communication link coupling the server to a requestor that originate the data request; determining an amount of data requested in the data request; determining how

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busy the server is; dynamically selecting a level of compression based at least on the bandwidth; and compressing the requested data using the selected level of compression. Neeman et al teaches of a source sends requested data to clients (page 8, lines 1-3), the bandwidth is determined over the transmission link (page 9, lines 4-6), the level of compression is set according to the bandwidth (page 9, lines 30-32), and the data is compressed (page 9, lines 20-29). It fails to teach of determining an amount of data requested in the data request and determining how busy the server is. Hunt et al teaches of determining the amount of data requested in the request (column 9, lines 37-54).

Neeman et al and Hunt et al are analogous art because they are both related to transmitting data over a network based on conditions.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the amount determination in Hunt et al with the system in Neeman et al because available bandwidth is used more efficiently (Hunt, column 2, lines 10-12).

Neeman et al in view of Hunt et al teaches of the limitations as recited above. It fails to teach of determining how busy the server is. Jason, Jr. teaches of a load monitor, which determines the busy the server is (paragraph 36).

Neeman et al in view of Hunt et al and Jason, Jr. are analogous art because they are both related to conditionally transmitting data over a network.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the load monitor in Jason, Jr. with the system in Neeman et al in view of Hunt et al because overloading can be prevented (Jason, paragraph 36).

Claim 4 discloses the method of claim 1, wherein said identifying comprises retrieving the bandwidth from a database. Neeman et al further teaches the bandwidth may be returned from a receiving client who simply reports the bandwidth (page 9, lines 5-6).

Claim 5 discloses the method of claim 1, wherein said dynamically selecting comprises identifying a level of compression suitable for the bandwidth. Neeman et al further teaches the level of compression chosen is suitable for the bandwidth (page 9, line 30 – page 10, line 3).

Claim 6 discloses a computer readable medium storing instructions that, when executed by a computer, cause the computer to perform a method of dynamically selecting a level of compression to be applied to data to be transmitted, the method comprising: receiving a data request at a server configured to serve data; identifying a bandwidth associated with a communication link coupling the server to a requestor that originate the data request; determining an amount of data requested in the data request; determining how busy the server is; dynamically selecting a level of compression based at least on the bandwidth; and compressing the requested data using the selected level of compression. Neeman et al teaches of a source sends requested data to clients (page 8, lines 1-3), the bandwidth is determined over the transmission link (page 9, lines 4-6), the level of compression is set according to the bandwidth (page 9, lines 30-32), and the data is compressed (page 9, lines 20-29). It fails to teach of determining an amount of data requested in the data request and

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determining how busy the server is. Hunt et al teaches of determining the amount of data requested in the request (column 9, lines 37-54).

Neeman et al and Hunt et al are analogous art because they are both related to transmitting data over a network based on conditions.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the amount determination in Hunt et al with the system in Neeman et al because available bandwidth is used more efficiently (Hunt, column 2, lines 10-12).

Neeman et al in view of Hunt et al teaches of the limitations as recited above. It fails to teach of determining how busy the server is. Jason, Jr. teaches of a load monitor, which determines the busy the server is (paragraph 36).

Neeman et al in view of Hunt et al and Jason, Jr. are analogous art because they are both related to conditionally transmitting data over a network.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the load monitor in Jason, Jr. with the system in Neeman et al in view of Hunt et al because overloading can be prevented (Jason, paragraph 36).

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Neeman et al (Foreign Publication GB 2367219A) in view of Hunt et al (US Patent #5,764,235), in view of Jason, Jr. (US PGPUB US2003/0061356) as applied to claim 1 above, and further in view of Port80 (Non Patent Literature).

Claim 2 discloses the method of claim 1, further comprising: determining whether the requested data are cacheable. Neeman et al in view of Hunt et al in view of Jason, Jr. teaches of the limitations of claim 1 as recited above. It fails to teach of determining

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whether the requested data are cacheable. Port80 teaches of determining if the data is cacheable (page 7, lines 35-38).

Neeman et al in view of Hunt et al in view of Jason, Jr. and Port80 are analogous art because they are both related to compressing and transmitting data over a network.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the cacheable feature in Port80 with the system in Neeman et al in view of Hunt et al in view of Jason, Jr. because enhanced performance of the system is provided (Port80, page 7, lines 14-15).

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Neeman et al (Foreign Publication GB 2367219A) in view of Hunt et al (US Patent #5,764,235), in view of Jason, Jr. (US PG PUB US2003/0061356) as applied to claim 1 above, and further in view of Willes et al (US PG PUB US2005/0120128).

Claim 3 discloses the method of claim 1, wherein said identifying comprises transferring a known quantity of data between the server and the requestor. Neeman et al in view of Hunt et al in view of Jason, Jr. teaches of the limitations of claim 1 as recited above. It fails to teach of identifying the bandwidth by transferring a known quantity of data between the server and the requestor. Willes et al teaches of measuring throughput capacity, which is widely known to transfer a known quantity of data between two points to measure bandwidth (paragraph 68).

Neeman et al in view of Hunt et al in view of Jason, Jr. and Willes et al are analogous art because they are both related to compressing and transmitting data over a network.

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At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the throughput capacity measuring feature in Willes et al with the system in Neeman et al in view of Hunt et al in view of Jason, Jr. because a system to reliably send data across a network which is efficient and able to change to conditions is provided.

Claims 9, 11, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Neeman et al (Foreign Publication GB 2367219A) in view of Port80 (Non Patent Literature).

Claim 9 discloses the method of claim 7, further comprising: determining whether the set of data is cacheable; wherein a higher level of compression is dynamically selected if the set of data is cacheable than if the set of data is not cacheable. Neeman et al teaches of the limitations of claim 7 as recited above. It fails to teach of determining whether the set of data is cacheable. Port80 teaches of determining if the data is cacheable and if the data is cacheable it is compressed and if it is not cacheable it is not compressed (page 7, lines 35-38).

Neeman et al and Port80 are analogous art because they are both related to compressing and transmitting data over a network.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the cacheable feature in Port80 with the system in Neeman et al because enhanced performance of the system is provided (Port80, page 7, lines 14-15).

Claim 11 discloses the method of claim 9, wherein said determining comprises: using an identity of the client, retrieving from a data collection a bandwidth associated

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with the identity. Neeman et al further teaches the bandwidth may be returned from a receiving client who simply reports the bandwidth (page 9, lines 5-6).

Claim 18 discloses the apparatus of claim 13, wherein the apparatus is configured to determine whether the requested set of data is cacheable. Neeman et al teaches of the limitations of claim 13 as recited above. It fails to teach of determining whether the set of data is cacheable. Port80 teaches of determining if the data is cacheable (page 7, lines 35-38).

Neeman et al and Port80 are analogous art because they are both related to compressing and transmitting data over a network.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the cacheable feature in Port80 with the system in Neeman et al because enhanced performance of the system is provided (Port80, page 7, lines 14-15).

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Neeman et al (Foreign Publication GB 2367219A) in view of Port80 (Non Patent Literature) as applied to claim 9 above, and further in view of Willes et al (US PGPUB US2005/0120128).

Claim 10 discloses the method of claim 9, wherein said determining comprises: transferring to the client a data object having a known size; and measuring the amount of time required for the transfer. Neeman et al in view of Port80 teaches of the limitations of claim 9 as recited above. It fails to teach of identifying the bandwidth by transferring a known size data object to a client and measuring the amount of time required for the transfer. Willes et al teaches of measuring throughput capacity, which

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is widely known to transfer a known quantity of data between to points to measure bandwidth (paragraph 68).

Neeman et al in view of Hunt et al in view of Jason, Jr. and Willes et al are analogous art because they are both related to compressing and transmitting data over a network.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the throughput capacity measuring feature in Willes et al with the system in Neeman et al in view of Hunt et al in view of Jason, Jr. because a system to reliably send data across a network which is efficient and able to change to conditions is provided.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Neeman et al (Foreign Publication GB 2367219A) in view of Willes et al (US PG PUB US2005/0120128).

Claim 15 discloses the apparatus of claim 14, wherein said bandwidth determination module is configured to calculate the bandwidth by transferring a known quantity of data between the data requestor and the apparatus. Neeman et al teaches of the limitations of claim 14 as recited above. It fails to teach of identifying the bandwidth by transferring a known quantity of data between the server and the requestor. Willes et al teaches of measuring throughput capacity, which is widely known to transfer a known quantity of data between to points to measure bandwidth (paragraph 68).

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Neeman et al and Willes et al are analogous art because they are both related to compressing and transmitting data over a network.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the throughput capacity measuring feature in Willes et al with the system in Neeman et al because a system to reliably send data across a network, which is efficient and able to change to conditions, is provided.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Neeman et al (Foreign Publication GB 2367219A) in view of Hunt et al (US Patent #5,764,235).

Claim 17 discloses the apparatus of claim 13, wherein the apparatus is configured to determine a size of the requested set of data. Neeman et al teaches of the limitations of claim 13 as recited above. It fails to teach of determining the size of the requested set of data. Hunt et al teaches of determining the amount of data requested in the request (column 9, lines 37-54).

Neeman et al and Hunt et al are analogous art because they are both related to transmitting data over a network based on conditions.

At the time of the invention it would have been obvious to a person of ordinary skill in the art to use the amount determination in Hunt et al with the system in Neeman et al because available bandwidth is used more efficiently (Hunt, column 2, lines 10-12).

Response to Arguments

Applicant's arguments filed September 11, 2006 have been fully considered but they are not persuasive.

Applicant asserts Neeman et al does not respond to requests for data from a client, and compresses the data based upon the bandwidth capability at the client. The Examiner respectfully disagrees, Neeman et al teaches of sending data requested by clients to the clients (page 8, lines 1-3), compressing the data and according to the received channel rate of the client delivering the compressed data at a rate as closely as possible (page 9, line 20 – page 10, line 3).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian J. Gillis whose telephone number is 571-272-7952. The examiner can normally be reached on M-F 7:30-5:00.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on 571-272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


BJG

Brian J Gillis
Examiner
Art Unit 2141


RUPAL DHARIA
SUPERVISORY PATENT EXAMINER